

Rhode Island Energy Efficiency

First Quarter 2014 | National Grid

May 8, 2014

Overview

National Grid is off to a great start for the first quarter of 2014. The Company focused on reaching new participants, including a mill projects in the Residential New Construction Program and creating new leads in the Commercial and Industrial (C&I) sector to develop a strong pipeline for 2014.

During the first quarter, National Grid launched new initiatives to create a strong foundation for reaching the 2014 energy savings targets. These included a focus on the Customer Directed Option (CDO) for the Small Business Direct Install program, where customers are able to use their own electricians and material vendors, and the launch of Upstream HVAC as part of the Large Commercial New Construction program.

National Grid also focused on improving the customer experience in the first quarter. In the EnergyWise program, full paperless invoicing was made available to all subcontractors to speed up processing time and an automated reminder call system was rolled out for customer appointments. In the Commercial and Industrial sector, the sales organization was restructured to create a 'channel sales' group to streamline the process and transaction experience for small and mid-sized customers.

Additionally, the 2013 Jobs Study was finalized in the first quarter. The study concluded that 544.73 full-time equivalent (FTE) employees had work in 2013 as a result of investments by National Grid in energy efficiency programs provided to its Rhode Island electricity and natural gas customers. The study also identified 814 companies and agencies involved in National Grid's 2013 energy efficiency programs, 78% of which were located in Rhode Island. The companies identified include those whose employees were counted in the FTE analysis, as well as additional companies who assisted customers to secure equipment rebates, for example through the New Construction or High Efficiency HVAC programs.

Based on the strong first quarter results, National Grid believes that 2014 will be a year full of innovation and success.

2014 Program & Initiative Updates

Residential New Construction

- The program had a strong start during the first quarter. The program enrolled a mill building (142 units) in January that will be completed during the second quarter of 2014. The developer will enroll another mill building later in the year.
- A contractor that participated in extensive field trainings, including training HVAC contractors, framers and site supervisors will be enrolling approximately 200 market rate units into the program over the next several years.
- RI RNC was well represented at Journal of Light Construction (JLC) Live annual conference.
- Outreach meetings were scheduled with O'Hearn Architects and developers including, Neighborworks, Church Community Housing Corp, Housing Authority of Newport, and Brady Sullivan.
- Trainings held during the first quarter included "Advanced Framing" in Tiverton and "Thermal Enclosure Checklists" for Olneyville Housing.
- Equipment rebates were incorporated into the New Construction offerings, which streamlined the process for program participants.

Income Eligible

- The Weatherization and Technical Committee met on 4/3/14 and discussed the Operation Manual; the DOE Grant; importance of getting permits in advance of work; QCI training and testing; and Knob and Tube Wiring Policy.
- Jules Junker, a 30-year leader in energy-efficient building and owner of ThermalWorks, will be conducting training with all Community Action Programs (CAP) Agencies and working with each auditor.
- During the first quarter, statewide knob & tube protocols were finalized, Hancock software was implemented, and statewide ASHRAE 62.2 2010 Implementation protocols were completed.

EnergyWise

- Completed 1,913 audits and 767 weatherization jobs in the first quarter.
- Full paperless invoicing was made available to all subcontractors to speed up processing time.
- An automated reminder call system was rolled out for customer appointments.
- The Company hosted Moisture Charette to highlight best practices for addressing moisture in customer homes.
- The Company designed and captured customer's incoming data for tiered audits which will commence in the second quarter.
- The Company also trained independent auditors that will perform same day air sealing for tier 4 audits.

EnergyWise and Income Eligible Multifamily

- The income eligible electric program is performing strongly as it already achieved 25% of the savings goal in the first quarter. Attached to this report is a case study on a specific 126-unit project in West Warwick.
- Additionally, the gas and electric programs have built a strong pipeline of projects for the remainder of 2014 and the Company remains confident that program goals will be met by the end of the year.
- The Company, along with its vendor RISE Engineering, met with Rhode Island Housing to discuss potential 2014 projects and to continue their strong relationship in marrying upcoming portfolio investments with the program incentives.
- The Company is currently developing a program enhancement to better serve more customers with deeper energy efficiency offerings and services. In addition to internal work on this topic, the Company received external technical assistance from expert firms, including the American Council for an Energy Efficient Economy (ACEEE).

ENERGYSTAR® Lighting and Appliances

Lighting:

- On March 25, 2014, an educational table was set up at the Stop & Shop in Providence to support the Stop & Shop GE Lighting Promotion.
- Over the first quarter, 13 school fundraising programs were implemented in Rhode Island.
- Lighting was promoted at the Park View Energy Fair in Cranston, which had 140 participants. Customers were particularly interested in LED lighting.

Appliances:

- Eight independent appliance dealers signed up for the room air conditioner midstream promotion.
- Tier 2 advanced power strips, with enhanced features like motion sensing, are now being offered through the program.
- Pool pump education began in the first quarter with the lead outreach vendor educating over 200 pool pump dealers, installers, and staff at regional seminars.
- Retailers responded positively to the dryer rebate.

ENERGYSTAR® HVAC (Heating and Cooling)

- More than 60 Rhode Island HVAC contractors attended the 2014 Gas Heat and Cool Smart kickoff meeting held on March 20 at the Hilton Garden Inn, Warwick RI. This event provided 2014 program and training opportunities.
- During the first quarter, 217 heat pump water heater (HPWH) rebates were approved for RI customers.
- Cool Smart staff participated in a RI-based Robinson Supply dealer meeting for RI HVAC contractors. More than 150 contractors attended this annual

event. Cool Smart staff presented program information and provided a Manual J load calculation demo.

- Several trainings were also held during the first quarter, including a QIV training class at SG Torrice in Providence, where 11 techs from 7 companies participated, and a Duct Diagnostics class at Supply New England in Middletown, where 8 techs from 6 companies participated.

Home Energy Reports

- The program is off to a great start in achieving gas savings due to the fact that small behavior changes lead to significant savings during the winter months.
- The program underwent a few major expansions beginning in early 2014. All electric customers began receiving access to the Rewards program where they can earn points for saving energy, which in turn can be redeemed for gift cards. In addition, the New Movers feature began targeted outreach to new electric and gas customers across the state.



Community Initiative

- The Rhode Island Energy Challenge: Find Your Four! is off to an excellent start in 2014, continuing to deliver the message of energy conservation and efficiency to grassroots networks across the state.
- The Company, alongside its vendor SmartPower, held a major press event on March 18th at the Boys and Girls Club in Warwick to celebrate the achievement of North Smithfield achieving its 5% participation goal and to officially kick-off the Challenge in the City of Warwick.
- Attendees at the event included town leaders from municipalities, non-profits, local businesses, and members of the press.
- The Challenge is now active in three towns/cities (North Smithfield, Newport, and Warwick) and the Company continues working to expand it to other communities.



System Reliability – Little Compton and Tiverton

- Program materials and processes have been reviewed and updated for 2014 implementation.

- The first edition of the “LinkUp” newsletter to all pilot-eligible customers was disseminated in late February, highlighting DemandLink offers as well as energy efficiency opportunities. An insert was created specifically for customers who have already participated in DemandLink rebates.
- An updated marketing effectiveness memo was delivered by the evaluation team at the end of the first quarter, reporting on analysis of 2012 and all of 2013.

Commercial & Industrial Customer Experience

- In order to have a more streamlined process and transaction experience for our small and mid-sized customers, and to increase our reach with vendors and customers, the sales organization was restructured to create a 'channel sales' group. The main intent of this team is to work with vendors to reach to customers based on specialization.

Codes Initiative

- During the first quarter, the Company and the vendor developed a schedule for all residential and commercial trainings for 2014. In addition, the Company developed a marketing strategy for a state-wide awareness plan for codes support.

Large Commercial New Construction

- The program is off to a slow start, with the majority of first quarter savings coming from the upstream lighting initiative. However, the dedicated new construction sales team has developed a large number of leads and extensive marketing was conducted.
- Upstream Lighting:
 - Upstream lighting started the year above Company projections but is in-line with previous program year first quarter results.
 - The Company worked with its third party program manager to make sure there is no fundamental issue with lamp market saturation.
 - The Company also continues to gather price and savings data to facilitate the addition of two new product offerings.
- Upstream HVAC:
 - The Company worked with the Massachusetts Program Administrators to solve some of the Upstream HVAC initiative challenges.
 - The Company made progress on building customers and contractor awareness of the initiative.
 - An investigation continued into what portion of the incremental can be covered and whether increased incentives are the key to more transactions and savings.
- Street lighting:
 - On March 17th the Company filed proposed changes to the customer owned street lighting tariff and closing documents.

- A technical session will be held at the Rhode Island Public Utilities Commission on May 6th to examine metering of customer owned LED street lighting.

Large Commercial Retrofit

- This program is off to a slow start in the first quarter; however, numerous leads were created to develop a strong pipeline.
- The sales team for large customers was restructured to better align with vertical markets, while the sales team for small and mid-sized customers was restructured to work with an increased pool of vendors to broaden participation.
- Several municipal applications were created in the first quarter.

Small Business Direct Install

- The program is off to a good start, especially in the electric sector. The program has already achieved 20% of the electric savings goal (completed and paid) and has an additional 11% under contract. The gas sector is off to a slower start, achieving 6% of the savings goal (completed and paid) with an additional 4% under contract.
- There were several success stories from the first quarter:
 - Maccoll Field YMCA updated the exterior of its facility with all new LED fixtures, replacing metal halide and high pressure sodium fixtures that used almost four times the electricity. With estimated savings of 111,171 kWh, this upgrade will save “the Y” over \$6,500 annually.
 - JD Byrider is a pre-owned car lot with two locations in Rhode Island. RISE worked with this customer to upgrade both facilities exterior with state of the art LED fixtures. Additionally the showrooms at each location were updated with high efficiency T8 lamps. Overall these upgrades helped improve the curb appeal of these locations in Cranston and Providence. These upgrades will save this customer over 135,314kWh or \$8,086 annually.
- The Customer Directed Option (CDO) portion of the program got off to a strong start in the 1st quarter, ending the period with 21 completed projects and 46 additional customer sites in the pipeline. Projects totaling over \$250K were completed, while almost \$500K is in the pipeline. Over 1,300 MWh are represented in approved, committed, or completed project status. Facilities included some exterior LED parking lot fixture replacements in small car dealerships and shopping plazas, in addition to the conventional direct install program mix upgrades for retail stores, offices, and hospitality facilities.

Evaluation

- The 2013 Jobs Study was completed and found that 544.73 full-time equivalent (FTE) employees had work in 2013 as a result of investments by National Grid in energy efficiency programs provided to its Rhode Island electricity and natural gas customers. The study also identified 814

companies and agencies involved in National Grid's 2013 energy efficiency programs, 78% of which were located in Rhode Island.

- Proposed changes to participation reporting for future efficiency plans and reports were proposed at the RI Collaborative in March and at the EERMC in April.
- All data collection for the evaluation of the 2012 RI Upstream lighting installations has been completed. The final report is expected to be completed in June.
- In addition, an evaluation of pre-rinse spray valves was started in February and a process evaluation of Income Eligible Single Family began in January.

Upcoming Events

- A Building Operator Certification (BOC) Level I class will begin in late May at the University of Rhode Island.
- NEEP's Northeast Energy Efficiency Summit Conference will be held in Newport, RI on June 2-3, 2014. <http://neep.org/neep-events/neep-summit/index>
- 2014 Power of Place Summit, Friday, May 23, 2014 at the Rhode Island Convention Center. <http://www.growsmartri.org/2014-summit/>
- Energy Efficiency Awareness Day, Moose Café, May 27, 2014, 4-8 pm. Tiverton, RI.

NATIONAL GRID ENERGY EFFICIENCY PROGRAMS IN RHODE ISLAND
Table 1. Summary of 2014 Target and Preliminary 1st Quarter Results

ELECTRIC PROGRAMS Sector and Program	(1) (2) (3) Energy Savings (Annual MWh) Pct			(4) (5) (6) Customer Participation			(7) (8) (9) Implementation Expenses (\$ 000)			(10) (11)	
	Target	Year To Date	Achieved	Approved Target	Year To Date	Pct Achieved	Budget	Year To Date	Pct Achieved	Lifetime savings, MWh	\$/kWh
Commercial and Industrial											
Large Commercial New Construction	27,472	2,712	9.9%	2,192	459	20.9%	\$7,811.0	\$1,212.6	15.5%	30,225	\$ 0.040
Large Commercial Retrofit	124,275	5,123	4.1%	833	100	12.0%	\$25,218.1	\$1,431.9	5.7%	62,387	\$ 0.023
Small Business Direct Install	21,170	4,267	20.2%	1,510	271	17.9%	\$12,645.5	\$1,585.4	12.5%	44,367	\$ 0.036
Commercial & Industrial Multifamily							\$41.5	\$10.9	26.3%		
Commercial & Industrial Pilots							\$364.1	\$0.0	0.0%		
Comprehensive Marketing - C&I							\$150.2	\$13.2	8.8%		
Finance Costs							\$1,000.0	\$1,000.0	100.0%		
SUBTOTAL	172,917	12,101	7.0%	4,535	830	18.3%	\$47,230.3	\$5,254.1	11.1%	136,980	\$ 0.038
Income Eligible Residential											
Single Family - Income Eligible Services	3,967	818	20.6%	2,450	588	24.0%	\$7,207.0	\$1,135.6	15.8%	10,358	\$ 0.110
Income Eligible Multifamily	2,113	538	25.5%	3,520	1,376	39.1%	\$2,092.3	\$391.0	18.7%	6,183	\$ 0.063
SUBTOTAL	6,080	1,356	22.3%	5,970	1,964	32.9%	\$9,299.3	\$1,526.6	16.4%	16,541	\$ 0.092
Non-Income Eligible Residential											
Residential New Construction	631	112	17.7%	458	85	18.6%	\$910.3	\$184.0	20.2%	1,426	\$ 0.129
ENERGY STAR® HVAC	726	369	50.8%	1,946	517	26.6%	\$919.7	\$300.0	32.6%	4,488	\$ 0.067
EnergyWise	7,674	3,066	40.0%	7,600	1,913	25.2%	\$6,448.4	\$1,907.2	29.6%	30,660	\$ 0.062
EnergyWise Multifamily	2,888	614	21.3%	4,500	1,669	37.1%	\$2,419.8	\$470.6	19.4%	7,037	\$ 0.067
ENERGY STAR® Lighting	35,731	4,021	11.3%	247,240	32,848	13.3%	\$7,389.7	\$709.1	9.6%	36,463	\$ 0.019
Residential Consumer Products	3,639	966	26.6%	13,285	6,559	49.4%	\$2,426.0	\$359.5	14.8%	6,917	\$ 0.052
Home Energy Reports	25,028	5,571	22.3%	227,600	200,482	88.1%	\$2,445.2	\$1,717.1	70.2%	5,571	\$ 0.308
Energy Efficiency Educational Programs							\$50.7	\$0.0	0.1%		
Residential Products Pilot							\$248.8	\$1.2	0.5%		
Community Based Initiatives - Residential							\$226.4	\$72.8	32.2%		
Comprehensive Marketing - Residential							\$581.9	\$11.4	2.0%		
SUBTOTAL	76,317	14,719	19.3%	502,629	244,073	49%	\$24,066.9	\$5,733.0	23.8%	92,561	\$ 0.062
Regulatory											
EERMC							\$816.7	\$0.0	0.0%		
OER							\$565.6	\$47.1	8.3%		
SUBTOTAL							\$1,382.3	\$47.1	3.4%		
TOTAL	255,314	28,176	11.0%	513,134	246,867	48.1%	\$ 81,978.9	\$ 12,560.8	15.3%	235,724	\$ 0.053
System Reliability Procurement							\$ 279.2	\$36.8	13.2%		

GAS PROGRAMS Sector and Program	(1) (2) (3) Energy Savings (MMBtu)			(4) (5) (6) Customer Participation			(7) (8) (9) Implementation Expenses (\$ 000)			(10) (11)	
	Approved Target	Year To Date	Pct Achieved	Approved Target	Year To Date	Pct Achieved	Approved Budget	Year To Date	Pct Achieved	Lifetime savings, MMBtu	\$/Lifetime MMBtu
Commercial and Industrial											
Large Commercial New Construction	31,863	3,485	10.9%	192	26	13.5%	\$2,096.7	(\$86.6)	-4.1%	74,474	\$ (1.163)
Large Commercial Retrofit	121,592	4,388	3.6%	606	14	2.3%	\$3,672.5	\$292.3	8.0%	47,797	\$ 6.116
Small Business Direct Install	10,496	582	5.5%	316	23	7.3%	\$545.9	\$10.4	1.9%	4,147	\$ 2.516
Commercial & Industrial Multifamily	5,511	593	10.8%	745	224	30.1%	\$488.8	\$34.9	7.1%	10,727	\$ 3.253
Commercial & Industrial Pilots							\$398.8	\$0.4	0.1%		
Comprehensive Marketing - C&I							\$173.6	\$7.9	4.6%		
Community Based Initiatives - C&I							\$30.0	\$10.9	36.4%		
Finance Costs							\$200.0	\$200.0	100.0%		
SUBTOTAL	169,463	9,046	5.3%	1,859	287	15.4%	\$7,606.4	\$470.3	6.2%	137,146	\$ 3.429
Income Eligible Residential											
Single Family - Income Eligible Services	6,395	1,124	17.6%	400	79	19.8%	\$2,584.0	\$394.8	15.3%	22,480	\$ 17.564
Income Eligible Multifamily	16,824	354	2.1%	2,200	51	2.3%	\$1,967.6	\$22.7	1.2%	4,954	\$ 4.586
SUBTOTAL	23,219	1,478	6.4%	2,600	130	5.0%	\$4,551.5	\$417.6	9.2%	27,434	\$ 15.221
Non-Income Eligible Residential											
EnergyWise	30,120	7,971	26.5%	2,000	668	33.4%	\$4,820.5	\$1,160.1	24.1%	159,420	\$ 7.277
Energy Star® HVAC	20,344	6,542	32.2%	2,584	578	22.4%	\$1,996.8	\$460.2	23.0%	108,121	\$ 4.257
EnergyWise Multifamily	9,256	2,261	24.4%	2,000	459	23.0%	\$1,314.7	\$137.8	10.5%	29,919	\$ 4.607
Home Energy Reports	73,877	33,212	45.0%	180,000	116,989	65.0%	\$468.3	\$207.5	44.3%	33,212	\$ 6.248
Residential New Construction	3,683	480	13.0%	392	43	11.0%	\$608.6	\$37.6	6.2%	11,995	\$ 3.136
Residential Products Pilot							\$136.2	(\$2.5)	-1.9%		
Comprehensive Marketing - Residential							\$139.7	\$1.3	0.9%		
Community Based Initiatives - Residential							\$44.4	\$10.4	23.4%		
SUBTOTAL	137,281	50,465	36.8%	186,976	118,737	63.5%	\$9,529.3	\$2,012.4	21.1%	342,668	\$ 5.873
Regulatory											
EERMC							\$245.4	\$0.0	0.0%		
OER							\$163.6	\$13.6	8.3%		
SUBTOTAL							\$409.0	\$13.6	3.3%		
TOTAL	329,963	60,990	18.5%	191,435	119,154	62.2%	\$ 22,096.2	\$ 2,913.9	13.2%	507,247	\$ 5.744

NOTES
(1)(4) Targets from Docket 4451 - Attachment 4, Table E-6 (electric) and Attachment 5, Table G-6 (gas).
(2) EnergyWise electric and gas savings are estimates from RISE Engineering
(3) Pct Achieved is Column (2)/ Column (1).
(6) Pct Achieved is Column (5)/ Column (4).
(7) Approved Implementation Expenses from Docket 4451, Attachment 4 Table E-4 (electric) and Attachment 5 Table G-5 (gas).
(8) Year To Date Implementation Expenses are net of evaluation expenses.
Small Business Direct Install Electric Includes OER funds spent in Quarter 1.
Large Commercial New Construction Gas shows negative spend due to a charge reversal from the 2012 program year.
(9) Pct Achieved is Column (8)/ Column (7).
(11) \$/lifetime kWh = Column (8)/Column (10); \$/lifetime therm = Column (8)*1000/Column (10)*10
System Reliability Procurement targets from Docket 4367, not included in Implementation Expenses Total
System Reliability Procurement targets and actuals do not reflect statewide EE amounts leveraged

West Warwick Housing Authority-62 Roberts St Apts -126 units (Income Eligible elec and Gas)

\$112,213.00 in electrical measures installed, estimated 195,798 annual Kwh saved

\$855.00 in gas measures installed, estimated 622 annual therms saved

- LED 2 x2 troffers installed throughout the common areas (elec)
- low flow showerheads and aerators to unit kitchens and baths (gas)
- CFL screw-in lamps for unit misc. portable lamps and fans (elec)
- Smart strips for each unit (elec)
- Variable Frequency Drives installed to hot water heat distribution system motors (elec)
- LED wall pack fixtures for common exterior building lighting (elec)
- vending misers installed to on-site vending machines (elec)
- LED exit signs (elec)



**Table 2
National Grid
Revolving Loan Funds**

Large C&I Revolving Loan Fund		Small Business Revolving Loan Fund		
(1)	2014 Funds Available	\$6,858,467	2014 Funds Available	\$3,241,378
(2)	2014 Loan budget	\$5,007,151	2014 Loan Budget	\$3,000,000
(3)	Committed	\$2,191,170	Committed	\$346,429
(4)	Paid	\$1,097,060	Paid	\$402,532
(5)	Available	<u>\$1,718,921</u>	Available	<u>\$2,251,039</u>

Rhode Island Public Energy Partnership (RI PEP)

(6)	2014/2015 Loan Budget	\$1,000,000
(7)	Committed	\$0
(8)	Paid	\$0
(9)	Available	<u>\$1,000,000</u>

Notes

1 Amount Company estimated in 2014 Plan, Table E-10

2 Budget adopted by Sales Team for 2014 operations.

3 As of May 27, 2014

4 As of May 27, 2014

5 Does not include loan repayments

6 RI PEP funding is over two years